

WHAT IS CLAIMED IS:

1. A preventive or therapeutic agent for chronic obstructive pulmonary disease containing polypeptide of the thioredoxin superfamily.
2. The preventive or therapeutic agent of claim 1, wherein said chronic
5 obstructive pulmonary disease is accompanied by infiltration of neutrophils and lymphocytes into lung cells.
3. The preventive or therapeutic agent of either claim 1 or 2, wherein said chronic obstructive pulmonary disease is caused by smoking or by pollutants in the air.
- 10 4. The preventive or therapeutic agent of claim 3, wherein said pollutants in the air are selected from a group consisting of fine particles in tobacco smoke, fine particles in exhaust gas, dust, and fine particles in soot.
5. The preventive or therapeutic agent according to any one of claim 1
15 to claim 4, wherein said chronic obstructive pulmonary disease is either pulmonary emphysema or chronic bronchitis.
6. The preventive or therapeutic agent according to any one of claim 1 to claim 5, wherein said chronic obstructive pulmonary disease is accompanied by one of the symptoms selected from a group
20 consisting of inflammation, fibrosis, and necrosis in tissues and cells.
7. The preventive or therapeutic agent according to any one of claim 1 to claim 6, wherein said polypeptide of the thioredoxin superfamily is human thioredoxin.